

receiver; and more. Currently, DISH's wholly owned subsidiary, Manifest Wireless LLC ("Manifest"), is conducting testing in Atlanta, Georgia on technology to utilize Manifest's 700 MHz licenses, as well as on the technology for using the 2 GHz spectrum at issue in this Application.

Nationwide Customer-Oriented Infrastructure. DISH's existing nationwide customer-interfacing infrastructure is also directly relevant to ensuring the highest and best use of the 2 GHz frequencies covered by this Application. DISH uses twelve internally operated or outsourced customer-service centers to handle calls from prospective and existing customers – including call centers in Arizona, Colorado, New Jersey, New York, Ohio, Oklahoma, Texas, Virginia, and West Virginia. DISH also operates four service centers in Colorado, South Carolina, and Texas, and three distribution centers in California, Colorado, and Georgia.

To sell its service, install its equipment, and ensure customer satisfaction, DISH has built and manages a network that would be difficult for any new service provider to replicate. DISH has developed partnerships with thousands of independent third party retailers, local and regional consumer electronics stores, nationwide retailers, and telecommunications companies. New customers receive high quality installation service by one of over 5,000 installers employed by DISH and another 7,500 contractors, located nationwide, while existing customers receive support from maintenance and repair centers located across the nation. DISH's Blockbuster acquisition has further enhanced DISH's ability to reach consumers through 1,500 bricks-and-mortar retail stores spread across the country.

These investments have benefited consumers and ushered in effective competition in the subscription television market. DISH is known as the value leader among all MVPDs. The company has a reputation for keeping internal costs low in order to pass savings on to

subscribers. DISH's single-minded focus on continually improving the customer experience has consistently earned it accolades from customer surveys.

EchoStar. As discussed above, EchoStar was "spun off" from DISH on January 1, 2008. EchoStar continues to provide DISH with considerable technical expertise and facilities, both in satellite operations and the design of hardware and service solutions for DISH. EchoStar is the sole supplier of digital set-top boxes to DISH, is a key provider of engineering services to DISH, and is a major provider of core satellite capacity for DISH's DBS service. EchoStar also designs, develops, and distributes digital set-top boxes and related products, including its Slingbox "placeshifting" technology. It provides digital broadcast operations, including satellite uplinking/downlinking, transmission services, signal processing, conditional access management, and other services. EchoStar employs some 1,800 engineers, holds 76 patents, and has approximately 1,100 patent applications on file. Moreover, EchoStar recently acquired Hughes Communications, Inc. ("Hughes"), a leading provider of fixed satellite broadband and network management solutions to the consumer and business markets.¹³ That acquisition will enable EchoStar to improve the effectiveness and availability of fixed satellite broadband nationwide.

b. Gamma

Gamma is a limited liability company and a wholly owned subsidiary of DISH that recently was formed for the purpose of acquiring the assets covered by the Agreement.

¹³ BRH Holdings GP, Ltd., Transferor, and EchoStar Corporation, Transferee; Applications for Consent to Transfer Control of Hughes Communications, Inc., Hughes Network Systems, LLC and HNS License Sub, LLC, *Order*, 26 FCC Rcd. 7976 (2011).

2. The TerreStar Parties

a. TerreStar Authorization Holders

TSL DIP¹⁴ holds a letter of intent (“LOI”) authorization, originally granted in 2001 to TSL DIP’s predecessor, TMI Communications and Company, Limited Partnership (“TMI”), to provide MSS in the United States on a non-common carrier basis using spectrum in the 2 GHz band.¹⁵ In addition, in January 2010, the Commission granted TSN blanket authority to operate ATC base stations and up to two million dual-mode MSS-ATC mobile earth terminals (“METs”) on a common carrier basis using MSS spectrum assigned to TSL.¹⁶

Overcoming recurrent challenges in raising the capital required to deploy its MSS network, TSN, TSL, and their affiliates have achieved several significant regulatory milestones

¹⁴ TSL DIP is a direct and wholly owned subsidiary of TSN DIP. TSC DIP, in turn, through its wholly owned subsidiary, Motient Ventures Holding, Inc., holds an indirect 89.3 percent controlling voting interest in TSN DIP.

¹⁵ See TMI Commc’ns and Co., *Order*, 16 FCC Rcd. 13808 (2001) (issuing TMI an LOI to use 2 GHz spectrum for the operation of a Canadian-licensed satellite), *affirmed*, *Memorandum Opinion and Order*, 18 FCC Rcd. 1405 (2003) (denying an application for review), *declared null and void*, TMI Commc’ns and Co., *Order*, 18 FCC Rcd. 1725 (2003) (declaring TMI’s LOI null and void for failure to satisfy implementation milestones), *reinstated*, TMI Commc’ns and Co., *Memorandum Opinion and Order*, 19 FCC Rcd. 12603 (2004) (granting a waiver of certain implementation milestone requirements and reinstating TMI’s LOI), *modified by*, Use of Returned Spectrum in the 2 GHz Mobile Satellite Service Frequency Bands, *Memorandum Opinion and Order*, 20 FCC Rcd. 19696 (2005) (modifying the LOI to grant TMI use of 20 MHz of 2 GHz MSS spectrum); TMI Commc’ns and Co., *Order*, 22 FCC Rcd. 8602 (2007) (modifying TMI’s LOI to list it in the name of TerreStar Networks, LLC) (“*TSN Transfer of Control Order*”). In a letter filed on May 15, 2007, TSN requested that the Commission correct its records to reflect the fact that the parties had asked for the LOI authorization to be listed in the name of TSN, and not, as had been stated in the *TSN Transfer of Control Order*, in the name of TerreStar Networks, LLC. See Letter from Joseph A. Godles, Counsel to TerreStar Networks Inc., to Marlene H. Dortch, Secretary, FCC, filed in File No. SAT-ASG-20021211-00238 (May 15, 2007). TSN in turn assigned this authorization to TSL, a wholly owned, direct subsidiary of TSN, in February 2008. See Letter from Mr. Joseph A. Godles, Counsel to TerreStar Networks Inc., to Marlene H. Dortch, Secretary, FCC, filed in File No. SAT-MOD-20070529-00075 (Feb. 4, 2008).

¹⁶ See TerreStar Networks Inc., *Order and Authorization*, 25 FCC Rcd. 228 (2010).

in the provision of MSS/ATC services. On July 1, 2009, the TerreStar-1 satellite was successfully launched and placed into its assigned orbital slot.¹⁷ On July 20, 2009, TerreStar certified the TerreStar-1 satellite as operational.¹⁸ On August 27, 2009, in-orbit testing of TerreStar-1 was successfully completed. As further described herein, today TerreStar is providing commercial wholesale MSS roaming as part of an AT&T Mobility (“AT&T”) offering.

b. TerreStar Parties’ Technology and Services

Today, TerreStar offers a next-generation mobile broadband network through a combination of the TerreStar-1 geostationary satellite, an all-Internet Protocol (“IP”) core network, and the GENUS™ handset, North America’s first integrated satellite/cellular smartphone. TerreStar currently provides consumers with ubiquitous satellite coverage throughout all 50 states, Puerto Rico, and the U.S. Virgin Islands, enabling applications tailored to homeland security, public safety, disaster preparedness, and rural or underserved community needs across North America.

The TerreStar-1 satellite has an 18 meter reflector, has a wing-span of approximately 106 feet, is roughly 5 stories tall, and weighs 15,220 pounds. TerreStar’s spot-beam technology, coupled with Ground Based Beam Forming, allows TerreStar to allocate power and spectrum to situation-specific incidents, ensuring capacity when and where it is needed. In combination, this has allowed TerreStar to develop a consumer-sized device capable of two-way mobile communication directly with the satellite.

¹⁷ TerreStar Networks Inc., Press Release, TerreStar Successfully Launches World’s Largest, Most Powerful Commercial Communications Satellite (July 1, 2009).

¹⁸ See Policy Branch Information, Public Notice, 24 FCC Rcd. 9329 (2009).

In September 2010, TerreStar began providing commercial service as a wholesale provider of satellite roaming to AT&T Mobility. AT&T markets the GENUS™ smartphone, enabling enterprise, government, and small business customers to add satellite access as a roaming option to AT&T's terrestrial mobile service. As a result, TerreStar's 2 GHz MSS service is now available to AT&T customers in unserved and underserved locations and as back-up capacity for public safety agencies, first responders, and others during times of crisis when terrestrial wireless networks may be unavailable.

The GENUS™ smartphone was developed by TerreStar and is a "quad-band" device capable of MSS in the 2 GHz band, in addition to multi-band communication on terrestrial GSM networks, using the licensed 800, 900, 1800, and 1900 MHz mobile bands.¹⁹ At present, a GENUS™ device can be authenticated for standalone MSS use or for communication on any authorized GSM network. While the GENUS™ today does not utilize the 2 GHz MSS band for terrestrial service, instead relying on existing terrestrial networks, future iterations can have the capability to use the S-band for terrestrial transmissions. The GENUS™ incorporates GEO-Mobile Radio Third Generation (GMR-1 3G) release 3 specifications, an adaptation of the EDGE air interface for satellite-delivered VoIP and packet data applications over IP, such as email, Internet access, Web browsing, and FTP.

The satellite and smartphone technology developed by TerreStar and other MSS/ATC licensees is designed to integrate MSS into the broad 3G to 4G mobile wireless market to complement networks based on 3GPP and IP Multimedia Subsystem ("IMS") standards by providing the ubiquitous coverage that cannot be achieved solely through terrestrial networks.

All networks – wireline, wireless, and satellite – have been converging upon integrated, packet data architectures, and one of several defining characteristics of 4G wireless networks is an all-IP architecture. As a result, and owing to the evolution of satellite technology in recent years, TerreStar has deployed an all-IP core network managed by IMS software architecture to provide, aggregate, and customize applications across various access methods and media devices. All call processing by TerreStar’s network is done in the packet-switched domain via a core IMS network that primarily uses Session Initiation Protocol. TerreStar’s network also features Radio Resource Management capabilities that coordinate spectrum use, load factors, and transmission power between the satellite and terrestrial facilities. Devices are able to interconnect with TerreStar’s network anchored to satellite gateway facilities and network operations centers in the United States and Canada.

c. TerreStar Bankruptcy Proceeding and Commission Approvals

To obtain the capital necessary to support these development initiatives and the operation of its MSS/ATC system, TSN issued secured payment-in-kind (“Senior PIK”) notes in 2007 and exchangeable unsecured payment-in-kind (“Exchangeable PIK”) notes in 2008. However, the subsequent global economic crisis created a precarious financial situation, hampering the ability of TSN and TSL to satisfy these debt obligations. On October 19, 2010, the TerreStar Debtors filed voluntary petitions with the Bankruptcy Court for reorganization under Chapter 11 of

intended to strengthen the TerreStar Debtors' financial position to help them achieve long-term success in the MSS market.²¹ On October 20, 2010, the Bankruptcy Court granted the request of the TerreStar Debtors for procedural consolidation and joint administration of their Chapter 11 cases.²²

In conjunction with these Chapter 11 cases, on November 3, 2010,²³ November 16, 2010,²⁴ and January 10, 2011,²⁵ the Commission approved applications for the *pro forma*

(Voluntary Petition of TerreStar Networks Holdings (Canada) Inc.); *TerreStar Networks (Canada) Inc.*, Case No. 10-15449 (SHL) (Bankr. S.D.N.Y. Oct. 19, 2010) [Docket No. 1] (Voluntary Petition of TerreStar Networks (Canada) Inc.); *0887729 B.C. Ltd.*, Case No. 10-15450 (SHL) (Bankr. S.D.N.Y. Oct. 19, 2010) [Docket No. 1] (Voluntary Petition of 0887729 B.C. Ltd.); *TerreStar License Inc.*, Case No. 10-15463 (SHL) (Bankr. S.D.N.Y. Oct. 19, 2010) [Docket No. 1] (Voluntary Petition of TerreStar License Inc.); *TerreStar National Services Inc.*, Case No. 10-15464 (SHL) (Bankr. S.D.N.Y. Oct. 19, 2010) [Docket No. 1] (Voluntary Petition of TerreStar National Services Inc.).

²¹ See *TerreStar Networks Inc.*, Case No. 10-15446 (SHL) ¶ 75 (Bankr. S.D.N.Y. Oct. 19, 2010) [Docket No. 3] (Declaration of Jeffrey W. Epstein Pursuant to Local Bankruptcy Rule 1007-2, in Support of First Day Pleadings). In early 2011, the cases of certain TerreStar affiliates, but not any of the TerreStar Debtors, were procedurally deconsolidated from Case No. 10-15443 (SHL) and added to the joint administration of Case No. 11-10612 (SHL), in which TSC DIP's case is the lead debtor case.

²² See *TerreStar Networks Inc.*, Case No. 10-15446 (SHL) (Bankr. S.D.N.Y. Oct. 20, 2010) [Docket No. 32] (Order Directing Joint Administration of Related Chapter 11 Cases), *as amended by* [Docket No. 445] (Order Granting Debtors' Motion to Amend Joint Administration of Related Chapter 11 Cases).

²³ On November 3, 2010, the Commission approved the *pro forma* assignments from TSL to TSL DIP of the Section 214 authorization for international MSS (File No. ITC-214-20100513-00194) and the Section 214 authorization for global facilities-based and resale authority (File No. ITC-214-20100513-00195). See International Authorizations Granted, Public Notice, Report No. TEL-01464 (rel. Nov. 4, 2010) (granting File No. ITC-ASG-20101022-00423).

²⁴ On November 16, 2010, the Commission approved the *pro forma* assignments from TSN to TSN DIP of the FSS Ku-band earth station authorization for two antennas in Las Vegas, Nevada (Call Sign E070098) and the MET license that includes the ATC authorization (Call Sign E060430). See Satellite Communications Services Information, Actions Taken, Public Notice, Report No. SES-01296 (rel. Nov. 17, 2010) (granting File Nos. SES-ASG-20101101-01416 and SES-ASG-20101101-01417). On November 16, 2010, the Commission also approved the *pro forma* assignment of the 2 GHz earth station authorization for 15 calibration earth stations (Call Sign E090061) from TSL to TSL DIP. See Satellite Communications Services Information,

assignments of TSN's and TSL's licenses to TSN DIP and TSL DIP, respectively. Further, TSN DIP filed an application with the FCC on December 10, 2010 seeking the *pro forma* assignment of TSN DIP's licenses and authorizations to TSL DIP. The FCC approved these *pro forma* assignment applications on December 20, 2010.²⁶ As a result, TSL DIP currently holds all of the licenses and authorizations previously held by TSN and TSL that are related to TSN's MSS/ATC system.

Further, on February 21, 2011, TSC, the indirect parent company of TSL DIP, filed a separate petition with the Bankruptcy Court also seeking protection under Chapter 11 of the Bankruptcy Code.²⁷ In turn, TSL DIP filed applications seeking FCC consent to the involuntary *pro forma* transfer of control of TSL DIP to TSC DIP resulting from TSC's Chapter 11 bankruptcy filing.²⁸ The FCC approved these *pro forma* transfer-of-control applications on June 29, 2011²⁹ and July 7, 2011.³⁰

Actions Taken, Public Notice, Report No. SES-01296 (rel. Nov. 17, 2010) (granting File No. SES-ASG-20101101-01419).

²⁵ On January 10, 2011, the Commission approved the *pro forma* assignment of the LOI (Call Sign S2633) to TSL DIP. See Policy Branch Information Actions Taken, Public Notice, Report No. SAT-00750 (rel. Jan. 14, 2011) (granting File No. SAT-ASG-20101022-00222).

²⁶ On December 20, 2010, the Commission approved the *pro forma* assignments from TSN DIP to TSL DIP of the FSS Ku-band earth station authorization for two antennas in Las Vegas Nevada (Call Sign E070098) and the MET license that includes the ATC authorization (Call Sign E060430). See Satellite Communications Services Information, Actions Taken, Public Notice, Report No. SES-01306 (rel. Dec. 22, 2010) (granting File Nos. SES-ASG-20101210-01529 and SES-ASG-20101210-01530).

²⁷ See *TerreStar Corporation*, Case No. 11-10612 (SHL) (Bankr. S.D.N.Y. Feb. 16, 2011) [Docket No. 1] (Voluntary Petition).

²⁸ See File Nos. SAT-T/C-20110623-00117, SES-T/C-20110623-00735, SES-T/C-20110623-00736, SES-T/C-20110623-00737, ITC-T/C-20110623-00174.

²⁹ On June 29, 2011, the Commission approved the *pro forma* transfer of control from TSC to TSC DIP of TSL DIP, the holder of a Section 214 authorization for international MSS (File No. ITC-214-20100513-00194) and a Section 214 authorization for global facilities-based and resale authority (File No. ITC-214-20100513-00195). See International Authorizations Granted, Public

In order to account for the possibility that TSN DIP and TSL DIP will exit their bankruptcy proceeding before consummation of the TSL DIP license transfer to Gamma, TSL DIP soon will request Commission authority in a separate application for the *pro forma* involuntary assignment of TSL DIP's licenses and authorizations to New TSL and the involuntary transfer of control of New TSL to a trust under the supervision of the Bankruptcy Court. The involuntary *pro forma* transfer of control of New TSL to the trust would be a technical interim step prior to the ultimate transfer of the authorizations to Gamma and would be irrelevant to the merits in the Commission's review of the transaction set forth in this Application.

B. Description of the Transaction

Under the Agreement, Gamma will acquire substantially all of the assets of TSN DIP, TSL DIP, and the other TerreStar Debtors for a purchase price of \$1.375 billion and will assume certain liabilities associated with the ongoing operations of their business.³¹ DISH is a party to

Notice, Report No. TEL-01504 (rel. June 30, 2011) (granting File No. ITC-T/C-20110623-00174).

³⁰ On July 7, 2011, the Commission approved the *pro forma* transfers of control from TSC to TSC DIP of TSL DIP, the licensee of (i) a 2 GHz earth station authorization for 15 calibration earth stations (Call Sign E090061), (ii) an FSS Ku-band earth station authorization for two antennas in Las Vegas Nevada (Call Sign E070098), (iii) the MET license that includes the ATC authorization (Call Sign E060430), and (iv) the LOI (Call Sign S2633). See Satellite Communications Services Information, Actions Taken, Public Notice, Report No. SES-01363 (rel. July 13, 2011) (granting File Nos. SES-T/C-20110623-00735, SES-T/C-20110623-00736, and SES-T/C-20110623-00737); see also Policy Branch Information Actions Taken, Public Notice, Report No. SAT-00790 (rel. July 8, 2011) (granting File No. SAT-T/C-20110623-00117).

³¹ Although the TerreStar Debtors ultimately agreed to sell substantially all of their assets to Gamma, the TerreStar Debtors' initial reorganization plan ("Initial Plan"), filed with the Bankruptcy Court on November 5, 2010, called for EchoStar to hold a majority voting interest in TSN upon TSN DIP's emergence from bankruptcy. See *TerreStar Networks Inc.*, Case No. 10-15446 (SHL) (Bankr. S.D.N.Y. Nov. 5, 2010) [Docket No. 82] (Joint Chapter 11 Plan of TerreStar Networks Inc., TerreStar National Services, Inc., 0887729 B.C. Ltd., TerreStar License Inc., TerreStar Networks Holdings (Canada) Inc., and TerreStar Networks (Canada) Inc.). On

the Agreement solely as guarantor of certain obligations of Gamma. As noted above, Gamma's offer to purchase substantially all of the TerreStar Debtors' assets pursuant to the Agreement was subject to the solicitation by TerreStar of higher and better offers in accordance with certain auction and sale procedures (the "Sale Procedures") approved by the Bankruptcy Court.³² After entering into the Agreement with Gamma on June 14, 2011, TerreStar received no competing bids that satisfied the requirements set forth in the Sale Procedures before the June 27, 2011 deadline for the submission of such bids. Therefore, in accordance with the Sale Procedures, on June 28, 2011, TerreStar cancelled the auction that had been scheduled for June 30, 2011.³³ As noted above, the asset sale to Gamma pursuant to the Agreement was approved by the Bankruptcy Court on July 7, 2011.³⁴

December 23, 2010, the parties filed applications seeking Commission consent for the transfer of control of TSL DIP from TSC DIP to EchoStar pursuant to the Initial Plan. *See* File Nos. SAT-T/C-20101223-00267, SES-T/C-20101230-01643, SES-T/C-20101230-01644, SES-T/C-20101230-01645, ISP-PDR-20101223-00022 and ITC-T/C-20101230-00492 (collectively, "EchoStar Applications"). The Initial Plan, however, subsequently was withdrawn by the TerreStar Debtors on February 16, 2011, and the EchoStar Applications therefore were not placed on public notice by the Commission. *See TerreStar Networks Inc.*, Case No. 10-15446 (SHL) (Bankr. S.D.N.Y. Feb. 16, 2011) [Docket No. 424] (Notice of Withdrawal of the Chapter 11 Plan Filed by the TerreStar Debtors); Letter from Tom Davidson, Counsel for TerreStar License Inc., and Pantelis Michalopoulos and Christopher Bjornson, Counsel for EchoStar Corporation, to Marlene H. Dortch, Secretary, FCC (Mar. 2, 2011) (withdrawing the EchoStar Applications); Satellite Communications Services Information, Actions Taken, Public Notice, Report No. SES-01328 (rel. Mar. 9, 2011) (reporting withdrawal by applicant of File Nos. SES-T/C-20101230-01643, SES-T/C-20101230-01644, and SES-T/C-20101230-01645).

³² *See TerreStar Networks Inc.*, Case No. 10-15446 (SHL) (Bankr. S.D.N.Y. May 4, 2011) [Docket No. 577] (Order, Pursuant to 11 U.S.C. §§ 105, 363, 364, 365, 503, and 507, and Fed. R. Bankr. P. 2002, 4001, 6004, 6006, 9008, and 9014, Approving (A) Bid Procedures, (B) Notice of Sale, Auction, and Sale Hearing, and (C) Assumption Procedures and Related Notices).

³³ *TerreStar Networks Inc.*, Case No. 10-15446 (SHL) (Bankr. S.D.N.Y. June 28, 2011) [Docket No. 651] (Notice of Cancellation of Auction and Announcement Regarding Stalking Horse Bidder as the Winning Bidder).

³⁴ *See TerreStar Networks Inc.*, Case No. 10-15446 (SHL) (Bankr. S.D.N.Y. July 7, 2011) [Docket No. 668] (Order (A) Approving Asset Purchase Agreement and Authorizing the Sale of Assets of Debtor Outside the Ordinary Course Of Business; (B) Authorizing the Sale of Assets

Of the purchase price of \$1.375 billion, Gamma has already paid \$1.345 billion to the TerreStar Debtors, \$50 million of which was deposited into an escrow account to provide funding for the Debtors' working capital through December 31, 2011, in accordance with the Agreement. The sale proceeds will be used to make distributions to claims of creditors of the TerreStar Debtors, which will facilitate the TerreStar Debtors' emergence from bankruptcy. Consummation of Gamma's acquisition of TerreStar's assets is subject to, among other things, approval by the Commission and the Canadian Federal Department of Industry, known as "Industry Canada."

C. Authorizations to Be Transferred

The Applicants are filing multiple concurrent applications seeking Commission consent to transfer the following FCC licenses and authorizations from TSL DIP to Gamma:

Call Sign/File No.	Description
S2633	LOI spectrum reservation to provide MSS in the 2 GHz spectrum band using the TerreStar-1 satellite. ³⁵
E090061	Authorization for 15 calibration earth stations operating in the 2 GHz band.
E070098	Fixed-Satellite Service ("FSS") Ku-band earth station authorization for two antennas in Las Vegas, Nevada.
E060430	License for two million common carrier MET handsets that includes ATC authorization.

Free and Clear of All Liens, Claims, Interests and Encumbrances; (C) Authorizing the Assumption and Sale and Assignment of Certain Executory Contracts and Unexpired Leases; and (D) Granting Related Relief).

³⁵ The transfer of control of the LOI authorization resulting from the instant transaction is not subject to public notice and prior Commission approval requirements. *See* New DBSD Satellite Services G.P., Debtor-in-Possession, Transfer of Control of Earth Station and Ancillary Terrestrial Component Licenses and Conforming Modifications to Commission Records, *Order*, 25 FCC Rcd. 13664, 13667-68 ¶ 7 (2010). Nonetheless, the Applicants have completed a Form 312 with respect to that transfer for informational purposes and to assist the Commission in making the appropriate administrative updates to its records.

ITC-214- 20100513-00194	Section 214 authorization for international MSS.
ITC-214- 20100513-00195	Section 214 authorization for global facilities-based and resale authority.

The Applicants request that the Commission also grant consent for the transfer to Gamma of any authorizations granted to TSL DIP or TSN DIP after the date of this Application.³⁶ In addition, the Applicants will file a letter under Section 1.65 of the Commission's rules³⁷ advising the Commission of any change to the real-party-in-interest for applications that may still be pending at the time of approval of this Application. Attached hereto as Attachment 3 are the Section 63.18 disclosures required by the Commission's rules, 47 C.F.R. §§ 63.18, 63.24(e), for assignment of the Section 214 authorizations.

III. THE TRANSACTION SERVES THE PUBLIC INTEREST

The proposed transaction satisfies every element of the Commission's public interest analysis under Section 310(d) of the Communications Act of 1996, as amended (the "Act"): (i) the transaction is in compliance with, and will not result in any violation of, the Act, other applicable statutes, or the Commission's rules; (ii) the transaction promises to yield substantial affirmative public interest benefits, as further discussed below; and (iii) the transaction will not frustrate or impair the Commission's implementation or enforcement of the Act or other related statutes or interfere with the Act's objectives.³⁸

³⁶ Further, the Applicants respectfully request that the Commission waive application of its "cut-off" rules with respect to any applications that may be filed by TSN DIP or TSL DIP during the Commission's review of the instant application to the extent that any such applications become subject to a Commission cut-off notice. No currently pending applications are subject to the cut-off rule.

³⁷ 47 C.F.R. § 1.65.

³⁸ 47 U.S.C. § 310(d); *see also, e.g.*, Comcast Corp., General Electric Co., and NBC Universal, Inc., *Memorandum Opinion and Order*, 26 FCC Rcd. 4238, 4247-49 ¶¶ 22-23, 26 (2011)

Indeed, the proposed transaction will yield substantial public interest benefits related to the “broad aims of the Communications Act,”³⁹ which include a deeply rooted preference for preserving and enhancing competition in relevant markets, accelerating private-sector deployment of advanced services, and generally managing spectrum in the public interest.⁴⁰ Importantly, the proposed transaction will also extricate the MSS/ATC authorizations and assets of TSN DIP and TSL DIP from the bankruptcy process and will enable their full deployment for competitive purposes. Further, the transaction will place these assets and authorizations under the control of DISH, a company whose technical expertise, financial resources, nationwide customer-interface infrastructure, and approximately 14-million subscriber base, provides a foundation for the deployment of an MSS/ATC service using the 2 GHz frequencies. The transaction will also combine the resources of the two 2 GHz MSS operators; these resources would otherwise remain balkanized and inefficiently used, and the creation of a long-term viable service benefitting the public would be far less likely.

(“Comcast-NBC Order”); XM Satellite Radio Holdings Inc. and Sirius Satellite Radio Inc., *Memorandum Opinion and Order and Report and Order*, 23 FCC Rcd. 12348, 12363 ¶ 30 (2008) (“Sirius-XM Order”); News Corp. and DIRECTV Group, Inc. and Liberty Media Corp., *Memorandum Opinion and Order*, 23 FCC Rcd. 3265, 3276 ¶ 22 (2008) (“Liberty Media-DIRECTV Order”); SBC Comm. Inc. and AT&T Corp., *Memorandum Opinion and Order*, 20 FCC Rcd. 18290, 18300 ¶ 16 (2005); Time Warner Inc. and America Online, Inc., *Memorandum Opinion and Order*, 16 FCC Rcd. 6547, 6555 ¶¶ 20-21 (2001).

³⁹ See *Sirius-XM Order*, 23 FCC Rcd. at 12364-65 ¶ 31; *Liberty Media-DIRECTV Order*, 23 FCC Rcd. at 3277-78 ¶ 23; AT&T Wireless Services, Inc. and Cingular Wireless Corp., *Memorandum Opinion and Order*, 19 FCC Rcd. 21522, 21544 ¶ 41 (2004) (“Cingular-AT&T Wireless Order”); General Motors Corp., Hughes Electronics Corp., and The News Corp., *Memorandum Opinion and Order*, 19 FCC Rcd. 473, 483-84 ¶ 16 (2004) (“News Corp.-Hughes Order”).

⁴⁰ See *Comcast-NBC Order*, 26 FCC Rcd. at 4248 ¶ 23; *Sirius-XM Order*, 23 FCC Rcd. at 12365 ¶ 31; *Liberty Media-DIRECTV Order*, 23 FCC Rcd. at 3278 ¶ 23; *Cingular-AT&T Wireless Order*, 19 FCC Rcd. at 21544 ¶ 41; Comcast Corp., and AT&T Corp., *Memorandum Opinion and Order*, 17 FCC Rcd. 23246, 23255 ¶ 27 (2002).

The transaction will create competition, not harm it. DISH does not provide mobile services today, and DBSD has not yet begun providing service. Only TerreStar has a current MSS (but no MSS/ATC) service offering, and it is one that remains in the early stage.

Without reducing the number of choices in any relevant market, the transaction will thus create a strengthened competitor for the provision of MSS/ATC services. Furthermore, it has the potential of creating a competitor against the mobile broadband incumbents, especially if the Commission grants the flexibility that the parties request in this Application with respect to the MSS/ATC requirements.

A. The Transaction Meets All Applicable Statutory and Regulatory Requirements

DISH, TSN DIP, and TSL DIP are all Commission licensees, and the qualifications of all relevant parties are therefore a matter of record before the Commission. The proposed transaction does not implicate any foreign ownership, aggregation, cross-ownership, or any other restrictions imposed by the Act, other applicable statute, or Commission regulation.

B. The Transaction Provides the TerreStar Debtors' Creditors with a Meaningful Recovery and Promotes the Productive Commercial Use of the TerreStar Debtors' Assets and Authorizations Emerging Out of Bankruptcy

The Commission has found that a transaction facilitating the retirement of debt and improving access to capital is likely to offer substantial public benefits.⁴¹ This transaction has secured for the TerreStar Debtors' creditors a meaningful recovery on their debt. More generally, the Commission has routinely found that license transfers effectuating bankruptcy-related restructurings benefit the public interest by facilitating the introduction of new services

⁴¹ See, e.g., Iridium Holdings LLC and GHL Acquisition Corp., *Memorandum Opinion and Order and Declaratory Ruling*, 24 FCC Rcd. 10725, 10736 ¶ 26 (2009).

and continuation of existing services to the public.⁴² In approving this transaction, the Commission will enable the TerreStar assets and authorizations to come under the ownership of a well-financed, capable, and recognized innovator in communications technology, which moreover has unique experience in developing an innovative and competitive retail operation and growing it from zero to approximately 14 million subscribers.

C. The Transaction Will Facilitate the More Efficient Use of 2 GHz MSS Spectrum

The Applicants expect that the proposed transaction taken together with DISH's proposed acquisition of DBSD, will result in the provision of next-generation broadband services through the combination of DISH's experience, existing service, and customer base, on the one hand, and TerreStar's and DBSD's MSS/ATC spectrum resources, facilities, expertise, and technology, on the other.

1. MSS Spectrum Plays a Key Role in Optimizing Spectrum for Mobile Broadband

MSS spectrum – and the 2 GHz MSS band in particular – offers an important opportunity to address the nation's mobile broadband spectrum gap. The Commission and the Administration are keenly aware of mobile broadband's benefits. In June 2010, President Obama issued a Presidential Memorandum, *Unleashing the Wireless Broadband Revolution*, which accurately extols the benefits of mobile communications – and mobile broadband in particular: “Few technological developments hold as much potential to enhance America's competitiveness, create jobs, and improve the quality of our lives as wireless high-speed access

⁴² See International Authorizations Granted, Public Notice, 19 FCC Rcd. 4079, 4080 (2004); Space Station Licensee, Inc. and Iridium Constellation LLC, *Memorandum Opinion and Order*, 17 FCC Rcd. 2271, 2288-89 ¶¶ 40-44 (2002); ICO-Teledesic Global Ltd., *Memorandum Opinion and Order*, 16 FCC Rcd. 6403, 6407 ¶ 10 (2001); see also Loral/Qualcomm Partnership, *Order*, 10 FCC Rcd. 2333, 2334 ¶ 12 (1995) (holding that, even if a “major” change of ownership occurs, it is in the public interest when it is motivated by a need for financing).

to the Internet.”⁴³ The President went on to emphasize our national interest in ensuring sufficient spectrum availability to support wireless innovation:

This new era in global technology leadership will only happen if there is adequate spectrum available to support the forthcoming myriad of wireless devices, networks, and applications that can drive the new economy.⁴⁴

These benefits are naturally accompanied by the exponential growth of mobile broadband demand, which has also justly been a primary telecommunications policy focus of the Administration and the Commission alike. Chairman Genachowski has been a stalwart leader for the advancement of mobile broadband with his call to action to make available additional spectrum for mobile broadband. As he has observed,

[M]obile broadband is being adopted faster than any computing platform in history. The number of smartphones and tablets being sold now exceeds the number of PCs. . . . Smartphones use twenty-four times the amount of data of traditional cell phones; other wireless devices, like tablets, can use more than 122 times the data.⁴⁵

In the Chairman’s words, “[t]his explosion in demand for spectrum is putting strain on the limited supply available for mobile broadband, leading to a spectrum crunch.”⁴⁶

The National Broadband Plan, for its part, acknowledges the underutilized nature of MSS spectrum and recognizes that it must be a key element of any plan to optimize spectrum for mobile broadband. The National Broadband Plan observes that MSS spectrum represents a significant amount of bandwidth with propagation characteristics suitable for mobile broadband

⁴³ The White House, Presidential Memorandum: Unleashing the Wireless Broadband Revolution (June 28, 2010) (“Presidential Memorandum”), <http://www.whitehouse.gov/the-press-office/presidential-memorandum-unleashing-wireless-broadband-revolution>.

⁴⁴ *Id.*

⁴⁵ Julius Genachowski, Chairman, FCC, Remarks at Mobile Future Forum, Washington, D.C., at 5 (Mar. 16, 2011), http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-305225A1.pdf.

and goes on to conclude, “[f]rom the standpoint of promoting broadband through increased use of the MSS spectrum, the FCC can take action to accelerate terrestrial deployments in the MSS bands.”⁴⁷

The Commission has started taking steps to help realize the potential of this spectrum. Earlier this year, the Commission adopted an MSS/ATC *Report and Order* “to make additional spectrum available for new investment in mobile broadband networks while also ensuring that the United States maintains robust mobile satellite service capabilities.”⁴⁸ First, the Commission added co-primary Fixed and Mobile allocations to the 2 GHz MSS band in order to “lay the groundwork for more flexible use of the band, including for terrestrial broadband services, in the future.”⁴⁹ Second, “[i]n contemplation of [MSS] spectrum being used for terrestrial wireless services,” the Commission extended its secondary-markets leasing rules to MSS spectrum used for ATC.⁵⁰

2. DISH’s Plan

DISH plans to deploy an MSS/ATC system using the full 40 MHz of S-band spectrum with in-orbit active and spare capacity on TerreStar’s T-1 and DBSD’s G-1 satellites, subject to grant of TerreStar’s and DBSD’s modification applications and waiver requests, and using the latest in satellite and terrestrial technologies. These broadband services will be offered over a single, technically integrated network for all satellite and terrestrial traffic. The offerings could

⁴⁶ *Id.*

⁴⁷ National Broadband Plan at 88-89.

⁴⁸ Fixed and Mobile Services in the Mobile Satellite Service Bands at 1525-1559 MHz and 1626.5-1660.5 MHz, 1610-1626.5 MHz and 2483.5-2500 MHz, and 2000-2020 MHz and 2180-2200 MHz, *Report and Order*, 26 FCC Rcd. 5710, 5710 ¶ 1 (2011).

⁴⁹ *Id.* at 5710 ¶ 2.

⁵⁰ *Id.* at 5710 ¶ 1.

consist of mobile, portable, or fixed broadband services individually or a combination thereof. DISH expects that the consumer equipment will include broadband-capable tablet computers, among other devices. Once the network is deployed, consumers will be able to use their devices for high-speed Internet access as well as a myriad of IP-based, over-the-top applications, including video. DISH anticipates offering broadband services both on a stand-alone basis and in a consumer-friendly bundle with its multichannel video services.

As part of its offering, DISH intends to continue supporting the GENUS™ handset phone (including, among other things, sales, marketing, technical assistance, and software and network maintenance) unless and until a new satellite/terrestrial hybrid device can be developed and deployed by DISH. Future iterations of the GENUS™ phone (or a successor device) may also feature improved interoperability with DBSD's G-1 satellite – the current GENUS™ already has a level of operability with that satellite.

3. Resulting Benefits and a Much Needed Check on Incumbents' Market Power

This transaction represents an important first step in obtaining spectrum necessary to establish DISH as a viable provider of mobile broadband services. Although still modest in comparison to the holdings of many incumbent mobile broadband providers, the spectrum assignments contemplated by the TerreStar and DBSD transactions, taken together, provide an essential foundation for DISH's ability to compete against them.

As DISH explained when it filed its application to acquire control over DBSD, DISH has been exploring the amount of spectrum necessary to fulfill the bandwidth demands of mobile broadband service and create a viable stand-alone provider.⁵¹ In this respect, DISH believes that each of the two 2 GHz MSS assignments likely would not be enough, standing alone, to support

⁵¹ DISH-DBSD Application at 15.

a robust nationwide service. Although the combination of the two 2 GHz assignments will yield a total of 40 MHz of spectrum and will allow DISH to compete to some extent against the terrestrial mobile broadband incumbents, DISH will potentially be facing other CMRS and MSS players with far more significant spectrum holdings for mobile broadband.⁵² For example, LightSquared now claims that it controls up to 59 MHz of spectrum.⁵³ As for major CMRS providers, as of January 2011, Sprint controlled an average of 133.2 MHz, and Verizon Wireless (“Verizon”) commanded more than 87 MHz of spectrum in most of the largest markets in the country, while AT&T boasted approximately 82 MHz, and T-Mobile was in control of 50.4 MHz.⁵⁴ The ability to combine the 2 GHz MSS spectrum, if coupled with the regulatory flexibility needed to implement DISH’s plans as requested in this Application, would further enhance the effectiveness and competitiveness of DISH’s proposed broadband service offerings.

A 2x20 MHz spectrum assignment, moreover, will allow DISH to deploy an advanced 4G network and maximize its spectrum efficiency. As part of its broadband availability model,

⁵² DISH’s subsidiary, Manifest Wireless, LLC, holds licenses for 6 MHz of 700 MHz spectrum (Block E) in 170 of 178 of the Basic Economic Areas (“BEAs”) throughout the country, which could be used to support a mobile broadband network. These 700 MHz E Block licenses cover all of the nation’s BEAs except for New York City, Los Angeles, San Francisco, Boston, Philadelphia, Guam, American Samoa, and the Gulf of Mexico. Certain DISH and EchoStar affiliates also hold Multichannel Video and Data Distribution Service licenses in the 12.2 – 12.7 GHz band and Local Multipoint Distribution Service licenses in the 29 GHz band.

⁵³ Lightsquared, Press Release, LightSquared Delivers Notice to Inmarsat Triggering Phase 2 of Re-Banding of L-Band Spectrum in North America (Jan. 28, 2011) (“When Phase 2 is fully executed, LightSquared will have the use of up to 59 MHz of terrestrial and L-Band ATC spectrum over the continental United States and Canada to operate its nationwide integrated 4G-LTE and satellite network.”).

⁵⁴ In its recent application for control of certain Qualcomm spectrum, for example, AT&T claims a per-transaction average of 82 MHz of spectrum available to it, and attributes available holdings of 133.2 MHz, 87.7 MHz, and 50.4 MHz to Sprint, Verizon, and T-Mobile, respectively. See AT&T Mobility Spectrum and Qualcomm Incorporated Seek FCC Consent to the Assignment of Lower 700 MHz Band Licenses, WT Docket No. 11-18, Application of AT&T, Exhibit 1, at 30-31 (filed Jan. 13, 2011).

the Commission used a 2x20 MHz frequency pairing as the baseline wireless broadband network because of its technical superiority.⁵⁵ As the Commission noted in that analysis, a 20 MHz carrier is more efficient in part because wider bands enable better statistical multiplexing.⁵⁶ As a result, “the capacity with a single 2x20 MHz carrier is 20 percent higher than with two 2x10 MHz carriers.”⁵⁷ The spectrum efficiency of a 2x20 MHz allocation will enable DISH to offer much improved wireless broadband to consumers.

DISH plans to deploy its network based on the LTE Advanced standard from the outset for its next generation MSS/ATC operations.⁵⁸ LTE Advanced is the focus of standardization work by vendors and carriers in 3GPP for broadband wireless communications globally, and commercial devices are expected to be generally available by 2014. As proposed, LTE Advanced significantly increases the capacity of wireless networks relative to current LTE systems, with downlink capacity that can meet the growing demand for wireless broadband by using the combination of advanced interference management techniques, heterogeneous networks that optimize system capacity, and the combining of radio carriers to generate higher degrees of spectral efficiency than current LTE systems.

One of the key advantages of LTE Advanced is its support for heterogeneous networks composed of cells of many different sizes and strengths. Such networks are more spectrally

⁵⁵ The Broadband Availability Gap, OBI Technical Paper No. 1, at 60, 73, 80 (April 2010) (noting that a 2x20 MHz frequency pairing has more capacity per MHz than narrower allocations).

⁵⁶ *Id.* at 73.

⁵⁷ *Id.* (citing QUALCOMM, Europe, Ericsson, Nokia and Nokia Siemens Networks in 3GPP TSG-RAN WG1 *in Text Proposal for TR on System Simulation Results*, http://www.3gpp.org/ftp/tsg_ran/WG1_RL1/TSGR1_53/Docs/R1-082141.zip).

⁵⁸ LTE Advanced is the name for LTE Release 10 and beyond. Today’s commercially deployed LTE networks generally use LTE Release 8. *See* Qualcomm August 2011 Presentation of LTE

efficient than today's homogeneous networks. Heterogeneous networks increase geographic reuse of spectrum in high-traffic, dense user areas through additional use of "pico" and "femto" cells, while still permitting wide coverage in less dense, lower traffic areas using more traditional "macro" cells. Networks incorporating pico and femto cells are expected to become much more efficient with the availability of LTE Advanced commercial devices, and their improved efficiencies will be a key part of increasing network capacity as network designers approach the theoretical limits of how much data can be packed into a single wireless signal. Future releases of LTE Advanced are expected to utilize advanced interference management technology to enable a device to communicate with multiple base stations at the same time. This would allow users to seamlessly transition through these topologically complex wireless networks and therefore facilitate optimal integration with MSS. In short, this innovative technology will allow DISH's initial deployment to use the most advanced, spectrally efficient technology, and generate significant public interest benefits. Notably, to capture the efficiencies of an LTE Advanced network, network rollout and device availability must go hand in hand.

To be sure, these benefits will be no panacea for all of the ills afflicting the increasingly concentrated CMRS market today, and particularly for the problems that the proposed AT&T/T-Mobile combination⁵⁹ bodes for competition. DISH's plan is threatened by that transaction; it would produce the nation's single largest CMRS provider and would result in a virtual duopoly within the mobile voice and data services market, with the top two carriers, AT&T and Verizon, controlling almost 80 percent of the market and over 90 percent of the industry's free cash

Advanced, Slide 6, *available at* <http://www.qualcomm.com/documents/lte-advanced-global-4g-solution> (last visited Aug. 10, 2011). S-Band is not included in the LTE Release 8 standard.

⁵⁹ Applications of AT&T Inc. and Deutsche Telekom AG, for Consent to Assign or Transfer Control of Licenses and Authorizations, WT Docket No. 11-65 (filed Apr. 21, 2011).

flow.⁶⁰ As the Commission has previously recognized, entrants into mobile voice and data services already face “major structural features that may act as entry barriers.”⁶¹ Permitting this level of market consolidation, however, would raise significant additional barriers. In particular, at 80 percent market concentration, the top two CMRS providers would be able to hinder DISH’s ability to gain subscribers by temporarily subsidizing their rates, withholding critical interconnection and roaming agreements, and otherwise abusing their market power to thwart any potential entrant into the market.⁶² Even for a company like DISH, with its long history of taking on incumbents and bringing competition to new markets, these barriers would be high indeed. Therefore, quick approval of these transactions and related waivers need not justify any less vigilance in the Commission’s evaluation of the proposed AT&T/T-Mobile combination.

D. The Transaction Will Promote, and Not Harm, Competition

Instead of eliminating any competitive choice, the TerreStar and DBSD transactions will create a strengthened competitor for the provision of MSS voice and data services, MSS/ATC service, and 4G mobile broadband services. In all potentially relevant markets, DISH will face strong competition from other MSS operators and from the formidable mobile broadband incumbents. The transaction will also promote competition among MSS providers by

⁶⁰ See Cecilia Kang, *Leap Wireless Opposes AT&T Bid to Buy T-Mobile*, Washington Post, May 24, 2011, available at http://www.washingtonpost.com/blogs/post-tech/post/leap-wireless-opposes-atandt-bid-to-buy-t-mobile/2011/05/23/AFDSeQAH_blog.html (last accessed August 19, 2011) (if AT&T’s takeover of T-Mobile is approved, “about 90 percent of pre-tax earnings for the wireless industry would go to AT&T and Verizon Wireless”); DISH Network LLC, Petition to Deny, Applications of AT&T Inc. and Deutsche Telekom AG, For Consent to Assign or Transfer Control of Licenses and Authorizations, WT Docket No. 11-65, at 4 (filed May 31, 2011) (“DISH Petition to Deny AT&T-T-Mobile Merger”).

⁶¹ Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993 Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial Mobile Services, WT Docket No. 10-133, *Fifteenth Report*, FCC 11-103 ¶ 56 (rel. June 27, 2011) (“*Fifteenth Mobile Competition Report*”).

⁶² DISH Petition to Deny AT&T-T-Mobile Merger at 9.

eliminating an MSS cross-ownership interest in the U.S. market – namely, the interest in TerreStar held by Harbinger Capital Partners Funds, which currently controls fellow MSS licensee LightSquared. Moreover, the combined TerreStar and DBSD spectrum is significantly below the levels approved by the FCC in the *Harbinger-SkyTerra Order*.⁶³

1. MSS and MSS/ATC

The proposed transaction will not adversely affect competition for MSS or MSS/ATC services. Neither DISH nor its affiliates currently provide MSS services. Further, DBSD currently does not provide commercial MSS. And, while TerreStar is an active participant in the MSS industry, its services are themselves still in the early stages. In addition to TerreStar, another five operators – Inmarsat PLC, LightSquared, Iridium Communications Inc., Globalstar, Inc. (“Globalstar”), and Orbcomm Inc. – all provide commercial MSS.⁶⁴ As a result, DISH’s proposed acquisition of DBSD and of the TerreStar Debtors’ authorizations and assets will not reduce the number of actual MSS competitors or the competition among active MSS participants.

MSS/ATC services, on the other hand, have yet to materialize. Most MSS operators have, or may obtain, ATC authorizations, and currently, three are authorized to provide ATC services in the United States: LightSquared, TerreStar, and DBSD.⁶⁵ Currently, neither TerreStar nor DBSD provides ATC service, and therefore their combination will not reduce the number of current MSS/ATC competitive choices. LightSquared, for its part, appears to be on the verge of

⁶³ SkyTerra Communications, Inc., and Harbinger Capital Partners Funds, *Memorandum Opinion and Order and Declaratory Ruling*, 25 FCC Rcd. 3059 (2010) (“*Harbinger-SkyTerra Order*”).

⁶⁴ See *id.* at 3078-79 ¶¶ 33-36 (describing the MSS offerings of current MSS competitors).

⁶⁵ Until recently, Globalstar was also authorized to provide ATC services over its Big LEO MSS spectrum, which it had leased to Open Range. The Commission, however, has suspended for now Globalstar’s authority for failing to meet the Commission’s gating requirements within the allotted timeframe. See Globalstar Licensee LLC, Application for Modification of License to Extend Dates for Coming into Compliance with Ancillary Terrestrial Component Rules, *Order*, 25 FCC Rcd. 13114, 13115 ¶ 1 (2010).

deploying an ATC network pursuant to its MSS/ATC waiver, which is conditioned on resolving interference issues related to adjacent-band Global Positioning System (“GPS”) operations.⁶⁶

Ultimately, the promise of MSS/ATC has yet to be fully realized for four principal reasons:

- Use of the maritime band by LightSquared and Inmarsat has been hampered by technical issues, including the interleaving of the L-band and the severe interference claimed by systems operating in adjacent spectrum;
- The MSS/ATC spectrum has been balkanized into relatively small assignments not optimized for delivering the broadband services desired by consumers;
- Financial difficulties, including the costs associated with market entry and access to sufficient funds for business plans, have pushed a number of the licensees into bankruptcy; and
- Licensees have been unable to achieve a critical mass of subscribers to create economies of scale to reduce costs and increase penetration.

The proposed TerreStar and DBSD transactions mitigate these problems substantially and advance the public interest with respect to effective utilization of the 2 GHz band. The combination and use of the 2 GHz band for MSS/ATC eliminates many of the technical coordination issues that have plagued other MSS bands. Use of the band also does not give rise to the GPS interference issues that have hampered the use of the L-band.⁶⁷ Moreover, the combination of the two 2 GHz MSS spectrum assignments helps to mitigate the bandwidth constraints that have limited the utility of these bands for broadband services. Further, DISH has

⁶⁶ LightSquared Subsidiary LLC, Request for Modification of its Authority for an Ancillary Terrestrial Component, *Order and Authorization*, 26 FCC Rcd. 566 (2011) (“*LightSquared ATC Order*”).

⁶⁷ See National Executive Committee, National Space-Based Positioning, Navigation, and Timely System Engineering Forum, Assessment of LightSquared Terrestrial Broadband System Effects on GPS Receivers and GPS-dependent Applications, *filed in* File No. SAT-MOD-20101118-00239, § 9-7 (filed Jul. 6, 2011) (suggesting that using the 2 GHz band for ATC services “could resolve existing interference issues” currently experienced by LightSquared).

adequate financial, technical, and operational resources and demonstrated ability to deliver on the broadband potential of these spectrum bands.

In any event, as the Commission recognized in the *Harbinger-SkyTerra Order*, the MSS industry is “not yet mature enough to allow [the Commission] to confidently assess competitive effects.”⁶⁸ While MSS providers have been in considerable flux,⁶⁹ one thing is certain: all MSS providers face competition from other MSS providers as well as from a multitude of other sources.⁷⁰ As a result, any potential competitive harms would be too “difficult and inherently speculative” to merit serious consideration.⁷¹

2. Mobile Broadband Services

As noted above, Chairman Genachowski repeatedly has stressed the benefits of mobile broadband: “no sector now holds more promise for opportunity, for economic growth, for improvements to our quality of life, and for our global competitiveness.”⁷² In the Chairman’s words, mobile broadband “could surpass all prior platforms in [its] potential to drive economic growth and opportunity.”⁷³ As the Chairman also stated recently:

Mobile broadband can also power innovations in areas like public safety, education, health care, and energy – including 21st century devices that can help police and firefighters save lives – digital textbooks and software that can help teachers teach and students learn – remote monitoring technologies for people with diabetes or heart disease – and smart-grid technologies that can reduce energy costs and increase energy security. . . .

⁶⁸ *Harbinger-SkyTerra Order*, 25 FCC Rcd. at 3077 ¶ 29.

⁶⁹ *Fifteenth Mobile Competition Report* ¶ 39 (“The mobile satellite service industry is undergoing major technological and structural changes.”).

⁷⁰ See, e.g., *Harbinger-SkyTerra Order*, 25 FCC Rcd. at 3080-81 ¶ 41.

⁷¹ *Id.* at 3076 ¶ 29.

⁷² See, e.g., Julius Genachowski, Chairman, FCC, Remarks as Prepared for Delivery, CTIA Wireless 2011, at 4 (Mar. 22, 2011).

⁷³ *Id.* at 5.